

JFW

PTO/SB/21 (08-03)

Approved for use through 08/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Application Number	10781,488
Filing Date	02/18/2004
First Named Inventor	Hermann Tropic
Art Unit	2171
Examiner Name	
Attorney Docket Number	BSSPT04

Total Number of Pages in This Submission

372

ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance communication to Technology Center (TC)
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	11 Non Patent Literature Documents
<input checked="" type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Response to Missing Parts/Incomplete Application	Remarks	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	IP Strategies Thomas M. Champagne
Signature	
Date	09/22/2004

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Heather L. Pagella		
Signature		Date	09/22/2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	Filing Date	First Named Inventor	Atty. Docket No.	Confirmation No.
10/781,488	02/18/2004	Hermann Tropf	BSSPT04	3107

Invention	Examiner	Art Unit
Database and Method for Organizing Data Elements		2171

Information Disclosure Statement

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

These remarks accompany an Information Disclosure Statement submitted in the above-captioned patent application.

Reference #1 is the U.S. counterpart to Reference #3, and is submitted as an English-language translation of Reference #3.

Reference #7 is a German-language non-patent literature document. Reference #6 is an English-language non-patent literature document that is summarized by Reference #7, and is submitted as an English-language translation of Reference #7.


Reference #13 is an entire textbook that is mentioned in the application, and is not submitted. This well-known textbook should be available to the examiner for consideration.

Please consider the disclosed references during examination of the instant application.

Respectfully submitted,

September 21, 2004
Date

TMC:hlp



Thomas M. Champagne
Registration No. 36,478
IP STRATEGIES
12 ½ Wall Street
Suite I
Asheville, North Carolina 28801
828.253.8600
828.253.8620 fax

Substitute for form 1449/PTO

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Complete if Known

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	1	of	3
-------	---	----	---

Application Number	10/781 488
--------------------	------------

Filing Date	02/18/2004
-------------	------------

First Named Inventor	Hermann Tropic
----------------------	----------------

Art Unit	2171
----------	------

Examiner Name

Attorney Docket Number	BSSPT04
------------------------	---------

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
	3	DE-196 35 429-A1	03-05-1998	BAYER, et al.		✓

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Complete if Known	
		Application Number	10/781,488
		Filing Date	02/18/2004
		First Named Inventor	Hermann Tropf
		Art Unit	2171
		Examiner Name	
Sheet 2	of 3	Attorney Docket Number	BSSPT04

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	4	TROPF, et al., "Multidimensional Range Search in Dynamically Balanced Trees." Angewandte Informatik, Feb. 1981, pp. 71-77, Wiesbaden, Germany.	✓
	5	ORENSTEIN, "Spatial Query Processing in an Object-Oriented Database System." ACM SIGMOD Intl. Conf. on Management of Data, 1986, pp. 326-336, Vol. 15, No. 2.	
	6	MARKL, "MISTRAL: Processing Relational Queries Using a Multidimensional Access Technique." Doctoral Thesis, Techn. Univ. Munich, 1999, Germany.	✓
	7	MARKL, et al., "Universalschlüssel: Datenbankindexte in mehreren Dimensionen." c't 1/2001, pp. 174-179, Hannover, Germany.	
	8	FALOUTSOS, "Multiattribute Hashing Using Gray Codes." ACM SIGMOD Intl. Conf. on Management of Data, 1986, pp. 227-238, Vol. 15, No. 2.	
	9	LAWDER, et al., "Querying Multi-Dimensional Data Indexed Using the Hilbert Space-Filling Curve." ACM SIGMOD Record, 2001, pp. 19-24, Vol. 3, No. 1.	
	10	LAWDER, "Calculation of Mappings Between One and n-Dimensional Values Using the Hilbert Space-Filling Curve." Technical Report no. JL1/00, 15 August 2000, pp. 1-13,	
		www.Citeseer.com, accessed 07/08/2003.	
	11	BUTZ, "Alternative Algorithm for Hilbert's Space-Filling Curve." IEEE Transactions on Computers, April 1971, pp. 424-426, Vol. 20.	
	12	"Literature Collection of Tree Index." www.comp.nus.edu.sg/~liaojiro/tree.htm, accessed 04/06/2004.	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known	
		Application Number	10/781,488
		Filing Date	02/18/2004
		First Named Inventor	Hermann Tropf
		Art Unit	2171
		Examiner Name	
Sheet 3	of 3	Attorney Docket Number	BSSPT04

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	13	SAMET, "The Design and Analysis of Spatial Data Structures." Addison-Wesley Series in Computer Science, 1 Aug. 1989,	
	14	GAEDE, et al., "Multidimensional Access Methods." ACM Computing Surveys, June 1998, pp. 170-231, Vol. 30, No. 2.	
	15	RAMSAK, et al., "Integrating the UB-Tree into a Database System Kernel." Proc. of the 26th Intl. Conf. on Very Large Databases, 2000, pp. 263-272, Cairo, Egypt.	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.